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Report to the Chairman, Subcommittee
on Government Information, Justice,
and Agriculture, Committee on
Government Operations, House of
Representatives

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Two Case Studies of
Federal Electronic
Dissemination



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**Information Management and
Technology Division**

B-239019.1

May 14, 1990

The Honorable Bob Wise, Jr.
Chairman, Subcommittee on Government
Information, Justice, and Agriculture
Committee on Government Operations
House of Representatives

Dear Mr. Chairman:

On October 3, 1989, we briefed your staff on the results of a survey of the effectiveness of electronic information dissemination policies and practices of selected programs of the Environmental Protection Agency (EPA) and the Department of Agriculture (USDA). The overall objective of our survey was to determine whether these policies and practices were ensuring the broadest dissemination of disclosable government information. We advised your staff that we found no material weaknesses in USDA's electronic information dissemination policies and practices; that we are reserving judgment on EPA's program pending the completion of a statutorily mandated review; and that we, therefore, planned to terminate our survey. You felt, however, that the Subcommittee and the public would nevertheless be interested in our results, and requested a report on our work.

Background

Both USDA and EPA have a number of information dissemination systems. We limited our analysis to two major on-line data bases — the Computerized Information Delivery Service (CIDS) at USDA and the Toxics Release Inventory (TRI) at EPA. CIDS is an electronically disseminated data base of agricultural marketing, trade, sales, production, and news information that is operated by a competitively selected contractor. TRI is an electronically disseminated data base of toxic chemicals emitted into the environment, which is accessible through the National Library of Medicine's TOXNET (Toxicology Data Network).

Results in Brief

We found no evidence that USDA's electronic dissemination policies and practices impede the public's access to its CIDS on-line data base. Our conclusion on EPA's TRI data base must await completion of a more thorough review now in progress. (The 1986 Superfund Amendments require us to conduct a comprehensive review of EPA's implementation of the Toxic Release Inventory Program. We anticipate issuing our report in early 1991.)

In general, the limited number of users we contacted during our survey mentioned no widespread problems with USDA's dissemination policies and practices, although a few had some difficulty with data timeliness or inadequate indexing. Users of USDA's CIDS data base confirmed that it generally meets the needs of users in the agricultural community. Several users of EPA's TRI data base found on-line access through the National Library of Medicine's TOXNET to be a cumbersome and time-consuming process.

Appendix I details our survey results. Appendix II explains our objectives, scope and methodology. We did not obtain formal agency comments on this report, but we did brief officials of both agencies on the results of our survey. They concurred with our findings and felt our report would confirm their commitment to provide all organizations and individuals fair access to their data bases. As arranged with your office, copies of this report shall be made available to the public upon request.

The report was prepared under the direction of Jack Brock, Director, Government Information and Financial Management, who can be reached at (202) 275-3195. Other major contributors are listed in appendix III.

Sincerely yours,



for Ralph V. Carlone
Assistant Comptroller General

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Abbreviations

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| ARL | Association of Research Libraries |
| CD-ROM | Compact Optical Disk - Read Only Memory |
| CIDS | Computerized Information Delivery Service |
| EPA | Environmental Protection Agency |
| GAO | General Accounting Office |
| IMTEC | Information Management and Technology Division |
| SARA | Superfund Amendments and Reauthorization Act of 1986 |
| TOXNET | Toxicology Data Network |
| TRI | Toxics Release Inventory |
| USDA | United States Department of Agriculture |

Survey Results

The Issues Addressed

In using information technology to conduct their business more effectively and efficiently, federal agencies have converted public information from paper documents and data files into electronic data base systems. Various public interest groups have expressed concern that this transformation of public information and public decision-making into electronic formats has occurred without serious public policy attention being paid to how it may affect citizen access rights to public information.

In recent hearings, workshops, and studies sponsored by several congressional committees; in reports published by the public interest groups; and in articles in professional journals, the debate on federal information policy has generally focused on potential consequences of disseminating government public information in electronic formats. Repeatedly one hears that the public is losing the ability to know (1) what information the federal government now has, (2) its content and format, and (3) how to locate/access it efficiently and economically. Two examples were cited in the ongoing debate: USDA's Electronic Dissemination of Information System (now called CIDS), which is accessible through commercial on-line services; and EPA's TRI data base, which is accessible on-line through the National Library of Medicine's TOXNET.

Is There a Legislative Mandate to Disseminate Information Electronically?

In general, the laws for both USDA and EPA contain many similar terms to describe how information is to be provided to the public. The terms "make available" and "disseminate" were used most often, but the legislation also used other terms such as "disclose," "clearinghouse," and "diffuse."

USDA's CIDS is not specifically mandated by law, but it does conform to statutory provisions requiring USDA to diffuse, disseminate, and publish a wide range of agricultural data and information. Through CIDS, USDA disseminates information such as daily market reports, weekly and monthly crop and livestock statistical reports, periodic economic outlook and situation reports, news releases, foreign agricultural trade leads, export sales reports, and weekly world agricultural production and trade statistics. Thus, USDA's CIDS was created to meet the public's need for electronically transmitted time-sensitive agricultural data.

In contrast, Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA — P.L. 99-499) contains precedent-setting provisions requiring EPA to establish the TRI data base and to make it available to

the public through telecommunications and other means¹. This statute thus enables citizens using a computer at home or at their local library to determine what toxic substances have been released in specific geographical areas.

Do the Agencies' Policies Hinder Public Access?

Policies developed by USDA did not appear to impede the public's access to government information. USDA's dissemination policy goes back to the act establishing the Department. The Act of 1862 instructs USDA to "acquire and diffuse useful information on subjects connected with agriculture." With respect to CIDS, USDA established two policy objectives: (1) not to offer value-added information directly to end users and thereby compete with established agricultural information vendors and (2) to make USDA information available to all subscribers at the same time. Minimum usage fees are set to make the service attractive to high-volume subscribers intending to resell the information to ultimate end-users.

EPA's information policy manual provides guidance on various subjects relating to the public's access to government information and apparently does not restrict such access.

What Procedures and Practices Ensure Federal Information's Dissemination in Accordance With Agency Policies?

Both USDA and EPA have developed and used information dissemination tools and techniques, including microcomputer floppy disk, magnetic tape, electronic bulletin boards, on-line data bases, and microfiche.

USDA's various agencies, such as the Extension Service and the National Agricultural Statistics Service, publish catalogs of available agricultural data which can be obtained in hard copy periodicals and monographs, as well as in various electronic media. For example, USDA advertises CIDS through notices in hard copy reports, press releases, agency conferences, and the Federal Register. CIDS is operated by a contractor selected through competitive procurement. The contractor sells only unanalyzed or "wholesale" information and must assure equal access by all customers upon release of market sensitive data by USDA. Since CIDS was designed to augment rather than replace the published reports of USDA agencies, the agencies still make their data available in printed form, as

¹Under Title III, Section 313 of SARA, we are conducting a comprehensive review of EPA's implementation of the Toxics Release Inventory Program, including how EPA has made this data accessible and available to the public.

well as through electronic media such as magnetic tapes and floppy diskettes. USDA is also exploring the use of CD-ROM (compact disc-read only memory) technology to meet the library/research community's need for archival files and to offer a wider range of agricultural information to college students and farmers.

USDA has not implemented a program to formally canvass users and assess their satisfaction with CIDS; however, the CIDS staff periodically attend meetings and conferences to obtain feedback from users such as agricultural research economists. Recent efforts by USDA on CIDS should increase the availability and use of agricultural data because the minimum monthly fee has been cut in half, and users can now access smaller report segments. Depository Libraries² also can participate as "cooperators" and thereby have the minimum monthly fee waived by USDA.

EPA has also developed policies and diverse mechanisms for informing the public. For example, EPA is disseminating electronically formatted TRI information by means other than on-line service. Microfiche copies were sent by EPA to selected public libraries in every county in the country; CD-ROMs will be sent by EPA to approximately 500 depository libraries and EPA regional libraries. Floppy diskettes, magnetic tape, microfiche, and CD-ROMs are or soon will be available for purchase through the National Technical Information Service and the Government Printing Office. EPA has prepared a directory of all libraries which have microfiche copies of the data base. Agency officials have expressed interest in improving the efficiency and effectiveness of current information dissemination systems and practices (including TRI), and towards that end, have recently contracted for a management assessment of its clearinghouses, electronic bulletin boards, hotlines, and dockets.

²Approximately 1400 Depository Libraries have been designated and are required by law (44 U.S.C. 1912) to receive from the Government Printing Office copies of all new or revised government publications authorized for dissemination to the public.

Are the Information Needs of the Users—Government, Private Sector and Public—Being Met by the Government Agencies?

In discussing CIDS and TRI with knowledgeable individuals and special interest-groups such as Association of Research Libraries (ARL), American Library Association, and OMB Watch, we encountered concern over USDA and EPA's information dissemination practices, such as poor indexing of reports, or inadequate distribution through the Depository Libraries. But none cited any instances with CIDS where the needed information/data was unavailable, inaccessible, too costly or too inaccurate to use. Moreover, these groups could not show any harm resulting from USDA's dissemination practices to justify their concerns.

An analysis of relevant documentation and of comments made by USDA agencies who use CIDS confirmed that CIDS does meet the information needs of these agencies' respective constituencies. At USDA, CIDS is aimed at information resellers — not at the ultimate end-users of information, although anyone may subscribe. Through contractual arrangements made between the subscriber and the CIDS contractor, CIDS automatically transmits to the subscriber's computer or mailbox the agricultural information specified by the subscriber. The number of information resellers who add value to the agricultural data retrieved from CIDS and then sell this value-added information retail to individual end-users, had reached 17 by October 1989. The number of private subscribers has grown from 16 in July 1986 to over 50 by January 1990.

Moreover, according to USDA representatives, contrary to recent published allegations, the public gained rather than lost ground with the implementation of CIDS because it augmented the traditional methods of disseminating agricultural information to users. In addition, two agricultural data users told us that individual farmers generally rely heavily on information retailers and other sources for their information because they do not have the time or the inclination to analyze massive amounts of raw agricultural data released through CIDS.

Evidence also from ARL supports our overall finding that the public can gain access to USDA's agricultural information. ARL requested its 119 libraries to provide us with documentation on problems they were having with the dissemination of government information. Only four expressed some concerns with such things as not receiving information promptly, or not being able to find some publications. But no one said the information was unavailable within USDA.

USDA's recent actions suggest the contractor will make the electronically disseminated agricultural data more attractive to individuals and organizations who may not have been able to afford USDA's computerized

information delivery service. The increased opportunity to obtain USDA's time-sensitive data was made possible by the agency's decision to: (a) cut the minimum monthly subscription fee from \$150 to \$75, (b) permit subscribers to electronically access smaller segments of long USDA reports, and (c) waive the minimum monthly subscription fee for those depository libraries and land-grant colleges who want to access CIDS. The first two actions will substantially reduce the costs to individual users needing immediate access to current USDA data.

While evidence indicates that information needs of users are generally being met by USDA's on-line system, discussions with a limited number of TRI users revealed that the TRI on-line system, as currently configured, is not considered to be user-friendly. Our own experiments with accessing the system bore this out. For example, we tried in three separate experiments to use the system based on the same information that was available to the public. The results of the first two experiments were inconclusive. In the third experiment, after many unsuccessful attempts to log onto the system, we were finally able to enter TOXNET, but could not access the TRI data base, even though we followed the instructions provided by the National Library of Medicine. To access TRI it was necessary to call the National Library of Medicine for help.

Most of the environmental organizations we talked with, including New York City's Department of Environmental Protection, were aware of the TRI data base, but had not used the on-line system. EPA has not developed sufficient documentation on the public's use of the TRI data base to show whether the user's needs are being met, because the on-line system had just recently become operational in July 1989. However, EPA officials said that EPA was taking steps to: (a) promote the availability of TRI data, (b) describe how the TRI data can be obtained and used in protecting public health, as well as the limitations on its use, and (c) identify potential users and their needs. Our on-going review of the program will assess the effectiveness of these actions.

Objectives, Scope and Methodology

The overall objective of this survey, conducted under our legislative authority to evaluate federal agency programs, was to determine whether the electronic dissemination policies and practices of the EPA and USDA were ensuring the broadest dissemination of disclosable government information. Since both EPA and USDA had developed and implemented a number of information dissemination systems (manual and automated), we restricted our survey analyses to two major on-line electronic data bases: EPA's TRI and USDA's CIDS.

Specifically, we wished to determine whether the agency's dissemination practices and systems were (1) satisfying legislative requirements and the public's right to know, (2) getting the right information to the agency's constituents, and (3) providing people fair access to public data and information. To do so we identified the statutory provisions directing EPA and USDA to disseminate data. We attended congressional hearings and analyzed legislative documents to ascertain current congressional thinking on granting public access to the government's electronic and published data. We talked with agency information resources management and program officials about the agency's legislative mandates and the dissemination programs set up to satisfy those statutory initiatives and to achieve the agency's major dissemination objectives.

Further, we interviewed representatives of selected producers and users of EPA's and USDA's information to identify and document their concerns about accessing, loading/downloading, or using the data on the two electronic dissemination systems. The users were also asked to identify and document the effect of any problems they had in getting or using this information.

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